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EXAMINER	
TSAI, TSUNG YIN	
ART UNIT	**PAPER NUMBER**
2609	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/771,096	CLARK, ADAM LESLIE	
	Examiner	Art Unit	
	Tsung-Yin Tsai	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/02/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/07/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objection

1. Claim 12 is objected to because of the following informalities:

(1) Regarding claim 12, where states "wherein creating a frame group table" replace with "wherein creating **the** frame group table."

Claim Rejection – 35 USC 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 8-23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US Patent Number 5,615,281) in view of Bormans et al (US Patent Number 6,058,211).

Yamaguchi et al disclose the method of communicating live audio/video information over a communications link, comprising:

(1) Regarding claims 1 and 26:

encoding a frame of audio/video data, segment by segment, comprising a number of pixels each having a plurality of pixel color components by (abstract, column 3 lines 55-65, column 4 lines 9-15. Region of an original image is seen as a segment of the image data stream. With in each region there is a plurality of

pixel color components.): creating a frame group table of encoded pixel values in which each pixel entry includes a dominant pixel color component of the plurality of pixel color components (column 5 lines 6-15, 400 figure 4. A processing unit create a table representing what priority color that has been selected from the region.); and determining a set of segment reference pixels for each encoded segment, wherein each one of the segment reference pixels is a pixel within each one of the encoded segments having a most intense dominant pixel color value (column 2 lines 25-30, M2 of figure 2. A representative pixel data is the dominant pixel selected from the region of image that is being examined).

Yamaguchi et al did not disclose communicating the frame group table and the segment reference pixels over a network to a receiver; and at the receiver, decoding the frame group table on a pixel-by-pixel basis by scaling the segment reference pixel parameter values according to each entry in the frame group table of encoded pixel parameter values to produce decoded pixels comprised of decoded pixel parameter values.

However, Bormans et al in the same field of endeavor disclose communicating the frame group table and the segment reference pixels over a network to a receiver (10 figure 2, 20 figure 3, 40 figure 5, 40 figure 10, 78-79 figure 11); and at the receiver (78 figure 11), decoding the frame group table on a pixel-by-pixel basis by scaling the segment reference pixel parameter values according to each entry in the frame group table of encoded pixel parameter values to produce decoded pixels comprised of decoded (figure 17) pixel

parameter values (10 figure 2, 20 figure 3, 40 figure 5, 40 figure 10, 78-79 figure 11, 78 figure 11, figure 17).

It would have been obvious to one skill in that art at the time of the invention to employ Bormans et al teaching with Yamaguchi et al to communicate the data over a network to a receiver that will decode the image by reversing the method taught by Yamaguchi et al in order to recreate the received encoded image, such that this will be the most efficient and accuracy way to recreate the data to its original form.

(2) Regarding claim 2:

the pixel parameter values include at least one of luminance, chrominance, and color depth information (Luminance, chrominance, and color depth information are inherent values that are traditionally collected even in uncompress data sets. This is done so that when recreating the pixels we will have the same exact values to corresponds with).

(3) Regarding claim 3:

Yamaguchi et al further teaches including scaling down each pixel parameter value prior to storing each pixel entry into the frame group table (column 1 lines 10-15, column 1 lines 25-45,column 4 lines 45-50. Lowering or reduce is seen as scaling down of the image. Storing those value on a magnetic disk is seen storing them onto the table that has been created for this image.).

(4) Regarding claim 4:

Yamaguchi et al further teaches the set of segment reference pixels comprise a representative of red pixel, green pixel, blue pixel, and black pixel (column 4 lines 5-10. Color-codes for primary colors, it also includes magenta, cyan and yellow. Red, Green and blue as well as cyan, magenta, yellow and black, thus CMYK is a familiar term, are inherently well know as the primary colors.).

(5) Regarding claim 8:

Yamaguchi et al further teaches determining the set of segment reference pixels includes comparing, on a pixel by pixel basis for each segment, a current pixel color value with a previously stored dominant pixel color value and storing the plurality of pixel color components and pixel parameters of the pixel with the most intense dominant pixel color component (abstract, column 5 lines 46-60, column 7 lines 40-60. Priority or dominated color codes are store in the created table. Segments are seen as lines are compare next to each other or priority pixel color.).

(6) Regarding claim 9:

Yamaguchi et al further teaches the plurality of pixel color components comprises at least one of the sets of primary color components, red, green, and blue, or cyan, magenta, and yellow (column 4 lines 5-10. Color codes are not just primary colors; it also includes magenta, cyan and yellow. Red, Green and blue as well as cyan, magenta and yellow are inherently well known as the primary colors.).

(7) Regarding claim 10:

Yamaguchi et al further teaches the dominant pixel color components include red, green, blue, and black (column 4 lines 5-10. Color-codes for primary colors, it also includes magenta, cyan and yellow. Red, Green and blue as well as cyan, magenta, yellow and black, thus CMYK is a familiar term, are inherently well know as the primary colors.).

(8) Regarding claim 11:

Yamaguchi et al further teaches an encoded segment is a row of pixels within the frame of audio/video data (column 7 lines 40-60. The line is seen as a line of pixel of encoded segment that is being compare to another line. Each line is a frame of pixel data hold in the buffer to be comparing with the next or second line.).

(9) Regarding claim 12:

Yamaguchi et al further teaches creating a frame group table further comprises scaling down the dominant pixel color component (column 1 lines 10-15, column 1 lines 25-45, column 4 lines 45-50. Lowering is seen as scaling down of the image; even the values of the dominant pixel color component. Storing those value on a magnetic disk is seen storing them onto the table that has been created for this image.)

(10) Regarding claim 13:

Yamaguchi et al further teaches the set of the segment reference pixel values further comprises a dominant color pixel value, non-dominant pixel color

values, and luminance and chrominance values (figure 6, column 5 lines 5-14, column 6 lines 18-34. Figure 6 show that data table structure is of the same from the high priority to the lower priority. This is seen as that there is no difference in the parameters storage for the high or low dominant pixel data. Luminance and chrominance values are inheriting values that are common use for determination of an image parameters.).

(11) Regarding claim 14:

Yamaguchi et al further teaches redundant encoded pixel values of the frame group table share common table entries (column 5 lines 5-14, column 6 lines 18-34. Color data of lower priority are also given space on the table. Their placement on the data table, which is on the lower end of the table, signifies that they are of lower priority, which is view as redundant.).

(12) Regarding claim 15:

Yamaguchi et al further teaches redundant encoded pixel values share identical dominant pixel color components and identical pixel parameter values (figure 6, column 5 lines 5-14, column 6 lines 18-34. Figure 6 show that data table structure is of the same from the high priority to the lower priority. This is seen as that there is no difference in the parameters storage for the high or low dominant pixel data.).

(13) Regarding claim 16:

Yamaguchi et al further teaches redundant encoded pixel values share dominant pixel color components and pixel parameters values that are similar to

one another within a tolerance range (figure 6, column 5 lines 5-14, column 6 lines 18-34. Data for the dominant and the low priority color components are store on the same data table structure. Tolerance range of the data structure examined is determined by the frame buffer scan in by Xmax.).

(14) Regarding claim 17:

Yamaguchi et al disclose all the subject matter as describe in claim 14 and further disclose the table entries format (column 5 lines 6-15, 400 figure 4. A processing unit create a table representing what priority color that has been selected from the region.), as well as the pixel parameter values that are store (column 5 lines 5-14, column 6 lines 18-34. Color data of lower priority are also given space on the table. Their placement on the data table, which is on the lower end of the table, signifies that they are of lower priority, which is view as redundant.).

Yamaguchi et al does not disclose regarding about the decoding by recalling previously decoded pixel parameter values associated with the table entry.

However, Bormans et al in the same field of endeavor teaches decoding by recalling previously decoded pixel parameter values associated with the table entry. (figure 17. The encoded image decoded by a decoder by means of recalling pixel parameter values.).

It would have been obvious to one skill in the art at the time of the invention to employ Bormans et al teachings with Yamaguchi et al decoding by

recalling previously decoded pixel parameter values associated with the table entry in order to recreate the received encoded image; such that this will conform to standards procedure of recreating the image to the highest accuracy.

(15) Regarding claim 18:

Yamaguchi et al further teaches scaling the set of segment reference pixel values comprises scaling the segment reference pixel's dominant color pixel value, and luminance and chrominance values (column 1 lines 10-15, column 1 lines 25-45,column 4 lines 45-50. Lowering or reduce is seen as scaling down of the values. Storing those value on a magnetic disk is seen storing them onto the table that has been created for this image. Luminance and chrominance values are inheriting values that are common use for determination of an image parameters.).

(16) Regarding claim 19:

Yamaguchi et al further teaches each pixel entry further comprises scaled down non-dominant pixel color components (column 1 lines 10-15, column 1 lines 25-45, column 4 lines 45-50, column 8 lines 1-5. Low priority pixel data are allocated or storage as well.).

(17) Regarding claim 20:

Yamaguchi et al further teaches the set of segment reference pixels are comprised of full-scale pixel parameter values (M22 figure 1, 400-500 figure 4, column 3 lines 55-65. Extraction unit show that the full-scale values is what is

use to compare what will be the highest priority pixel to be selected for the table.).

(18) Regarding claim 21:

Yamaguchi et al further teaches scaling the set of segment reference pixel values further comprises scaling each of the full-scale pixel parameter values with the each corresponding encoded pixel parameter values (M22 figure 1, 400 –500 figure 4, column 3 lines 55-65. Extraction unit show that the full-scale values of the examine segment, this what is use to compare what will be the highest priority pixel to be selected for the table. The values of the non-dominate pixels are also enter into the data table and encoded.).

(19) Regarding claim 22:

Yamaguchi et al further teaches comprising synchronizing audio data associated with the table of encoded pixel parameter values (Data frames, with data containing the table and the table containing the data of the pixel, pointer in the data frame to point to the next data frame to be process, storing and encoding audio data in the frame are all inherit values contain within one data frame. This is done because it will ensure the media playing will always be in synchronize; instead of waiting for varies parts of the media to catch up with each other.).

(19) Regarding claim 23:

Yamaguchi et al disclose all the subject matter as describe in claim 1 and further disclose the table of encoded pixel parameter values (column 5 lines 6-

15, 400 figure 4. A processing unit creates a table representing what priority color that has been selected from the region.).

Yamaguchi et al does not disclose regarding about the decoder to a playback device.

However, Bormans et al in the same field of endeavor teaches decode to a playback device (figure 17).

It would have been obvious to one skill in the art at the time of the invention to employ Bormans et al teachings with Yamaguchi et al to decode the encoded image by reversing the method of encoding in order to recreate the received encoded image; such that this will be the procedure of recreating the image to the highest accuracy.

(20) Regarding claim 25:

Yamaguchi et al disclose of the subject matter as describe in claim 1 above.

Yamaguchi et al does not teach where transmitting through communications link is a low-bandwidth communications link.

However, Bormans et al disclose where transmitting through communications link is a low-bandwidth communications link (column 1 lines 20-30. Existing analogue or digital telephones lines are seen as media that have low bandwidth to data transfer).

It would have been obvious to one skill in the art at the time of the invention to employ Bormans et al teachings to Yamaguchi et al that the encoded

data will be transmitted over some media, receive and decoded in the fashion that is suitable to retrieve the data again. Compressing the data image for transmitting the encoded frame table data over media that are of low bandwidth such that it will be a better way of bandwidth usage and allocation for such media that can only transfer in low bandwidth.

5. Claims 5-7 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US Patent Number 5,615,281) in view of Bormans et al (US Patent Number 6,058,211) as applied to claims 1 and 23 above, and in further view of Ando et al (6,662,309 B2).

(1) Regarding claim 5:

Yamaguchi et al and Bormans et al teaches all of the subject matter as describe in claim 1, and further disclose regarding the frame group table (column 5 lines 6-15, 400 figure 4. A processing unit creates a table representing what priority color that has been selected from the region) composes of data of the set of segment reference pixels (column 2 lines 25-30, M2 of figure 2. A representative pixel data is the dominant pixel selected from the region of image that is being examined).

Yamaguchi et al and Bormans et al do not teach about header.

However, Ando et al teaches where the data frame group including headers (b figure 23, where part 1004 is seen as the header of the start of the data frame).

It would have been obvious to one skill in the art at the time of the invention to employ Ando et al teaches to Yamaguchi et al and Bormans et al regarding headers for the data frame group, such that when the data frame group is being processing it will process in the correct way in order to retrieve the data frame group in the accuracy format.

(2) Regarding claim 6:

Yamaguchi et al and Bormans et al teaches about frame group table (column 5 lines 6-15, 400 figure 4. A processing unit creates a table representing what priority color that has been selected from the region.)

Yamaguchi et al does not teach where the frame group table includes a pointer that point to the next frame group file.

However, Ando et al teaches about pointer in a frame group file (figure 26, where the data frame states a pointer to the next data frame).

It would have been obvious to one skill in the art at the time of the invention to employ Ando et al teaches to Yamaguchi et al and Bormans et al regarding the pointer in the frame data file, such that when the data file is process they will be process in the correct and sequential order.

(3) Regarding claim 7:

Yamaguchi et al and Bormans et al teaches regarding frame group file (column 5 lines 6-15, 400 figure 4. A processing unit creates a table representing what priority color that has been selected from the region.).

Yamaguchi et al and Bormans et al do not teach regarding where the data frame group including additional data of audio.

However, Ando et al teaches where the data frame group including storing additional data of audio (figure 23, figure 24 and figure 26. Where part c-f figure 23 show that the data frame includes not only video but audio as well.)

It would have been obvious to one skill in the art at the time of the invention to employ Ando et al teaches to Yamaguchi et al and Bormans et al regarding storing of additional data of audio, such this will ensure the media playing will always be in synchronize; instead of waiting for varies parts of the media to catch up with each other.

(2) Regarding claim 24:

Yamaguchi et al and Bormans et al teach communicating with playback devices (column 1 lines 20-30).

Yamaguchi et al and Bormans et al do not teach about synchronization.

However, Ando et al teaches regarding synchronization (column 32 lines 25-30. The synchronization code is added so that the playback device will have such command during playback of the media.)

It would have been obvious to one skill in the art at the time of the invention to employ Ando et al teaching to Yamaguchi et al and Bormans et al regarding synchronization, such that will ensure the media playing will always be in synchronize; instead of waiting for varies parts of the media to catch up with each other.

Double Patent

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-3, 5-12,14-16,19 and 22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, 9-13, 15-16 and 18-20 of copending Application No. 10/770,952 in view of Bormans et al (US Patent Number 6,058,211).

(1) Regarding claim 1:

Copending Application No. 10/770,952 disclose method comprising encoding, segment by segment, frames of audio/video data, including a number of pixels each having a plurality of pixel color components by creating a frame

group table of encoded pixel values in which each pixel entry includes a dominant pixel color component of the plurality of pixel color components; determining a set of segment reference pixels for each encoded segment, wherein each one of the segment reference pixels is comprised of segment reference pixel parameter values and is a pixel within each one of the encoded segments having a most intense dominant pixel color value (reading claim 1 disclose will show all the following limitations stated);

Copending Application No. 10/770,952 does not disclose communicating the frame group table and the segment reference pixels over a network to a receiver; and at the receiver, decoding the frame group table on a pixel-by-pixel basis by scaling the segment reference pixel parameter values according to each entry in the frame group table of encoded pixel parameter values to produce decoded pixels comprised of decoded pixel parameter values.

However, Bormans et al in the same field of endeavor disclose communicating the frame group table and the segment reference pixels over a network to a receiver (10 figure 2, 20 figure 3, 40 figure 5, 40 figure 10, 78-79 figure 11); and at the receiver (78 figure 11), decoding the frame group table on a pixel-by-pixel basis by scaling the segment reference pixel parameter values according to each entry in the frame group table of encoded pixel parameter values to produce decoded pixels comprised of decoded (figure 17) pixel parameter values (10 figure 2, 20 figure 3, 40 figure 5, 40 figure 10, 78-79 figure 11, 78 figure 11, figure 17).

It would have been obvious to one skill in that art at the time of the invention to employ Bormans et al teaching Copending Application No. 10/770,952 to communicate the data over a network to a receiver that will decode the image by reversing the method in order to recreate the received encoded image, such that this will be the most efficient and accuracy way to transmit and recreate the data to its original form.

(2) Regarding claims 2-3, 5-12,14-16,19 and 22 are rejected base on the same wording as claims 3-7, 9-13, 15-16 and 18-20 respectively, of copending Application No. 10/770,952.

This is a provisional obliviousness-type double patent rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamaguchi et al (EP 0 477 904 A2) disclose a method of and apparatus for generating reduced image.

Ostrovsky et al (US Patent Number 6,091,850) disclose method of compressing and decompressing graphic images.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tsung-Yin Tsai whose telephone number is (571) 270-1671. The examiner can normally be reached on Monday - Friday 8 am - 5 pm ESP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on (571) 272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tsung-Yin Tsai
March 20, 2007

SHUWANG LIU
SUPERVISORY PATENT EXAMINER